

Amendments to the Specification

Please replace paragraph [0020] with the following amended paragraph:

[0020] In Figure 1 there is illustrated one embodiment of an electrodialysis cell stack 10, exploded laterally. At one end is an electrode stream spacer 12 defining two rectangular apertures 14 and 14' separated by partition 17 having aligned holes 69 therein for insertion of bolts 68. In the depicted embodiment the electrode stream spacer is approximately 14 inches by 24 inches, though it will be recognized that various sizes may be used. Also defined in the electrode stream space 12 are eight conduit apertures 16a, 16b, 16c, 16d, 16e, 16f, 16g and 16h.

Please replace paragraph [0021] with the following amended paragraph:

[0021] Adjacent to the electrode stream spacer 12 is an anion exchange membrane 18, many of which are well known in the art. One commercially available material is Neosepta AFN produced by Tokuyama Corporation. The anion exchange membrane 18 is shaped and sized substantially identically to the electrode stream spacer 12 and includes conduit apertures 19 a-h in register with the conduit apertures 16 a-h defined in the electrode stream spacer 12. The anion exchange membrane 18, and similar shaped and sized membranes 29, 40, 52 described herein, have aligned holes 69 along a mid-length in register with holes 69 defined in electrode stream spacer 12.

Please replace paragraph [0022] with the following paragraph:

[0022] Adjacent to the anion exchange membrane 18 is a concentrate split cell spacer 20 defining two apertures 22 and 22' separated by partition 63 having aligned holes 69 therein. Each of the apertures 22 and 22' has the shape of an abbreviated rectangle in which two squares have been removed from diagonally opposed corners and all corners have been rounded. Conduit apertures 24a, 24c, 24e and 24h are defined in the concentrate split cell spacer. The concentrate split cell spacer 20 is shaped and sized substantially identical to the electrode stream

spacer 12. The aperture 22 is in register with the rectangular aperture 14 and the aperture 22' is in register with the rectangular aperture 14'.

Please replace paragraph [0025] with the following paragraph:

[0025] Adjacent to the cation exchange membrane 29 is a dilution stream split cell spacer 32 defining two apertures 34 and 34' separated by partition 65 having aligned holes 69 therein. Each of the apertures 34 and 34' has the shape of an abbreviated rectangle in which two squares have been removed from diagonally opposed corners and all corners have been rounded. The apertures 22 and 22' are mirror images of the apertures 34 and 34'. Conduit apertures 36b, 36d, 36e and 36g are defined in the dilution stream split cell spacer 32. The dilution stream split cell spacer 32 is shaped and sized substantially identically to the electrode stream spacer 12. The aperture 34 is in register with the rectangular aperture 14 and the aperture 34' is in register with the rectangular aperture 14' to provide electrically conductive fluid connection to the apertures 14 and 14', respectively.

Please replace paragraph [0028] with the following amended paragraph.

[0028] Adjacent to the anion exchange membrane 40 is a concentrate split cell spacer 44 defining two apertures 46 and 46' separated by partition 67 having aligned holes 69 therein. The concentrate split cell spacer is identical to the concentrate split cell spacer 20 and defines conduit apertures 48a, 48c, 48f and 48h. The aperture 46 is in register with the rectangular aperture 14 and the aperture 46' is in register with the rectangular aperture 14' to provide electrically conductive fluid connection to the apertures 14 and 14', respectively.

Please replace paragraph [0031] with the following paragraph.

[0031] Adjacent to the cation exchange membrane 52 is an electrode stream spacer 56 defining two rectangular apertures 58 and 58' separated by partition 61 having aligned holes 69

therein. The electrode stream spacer 56 is substantially identical to the electrode stream spacer 12. Also defined in the electrode stream spacer 56 are eight conduit apertures 60a-h, which are in register with the conduit apertures 16a-h respectively.

Please replace paragraph [0035] with the following amended paragraph:

[0035] In Figures 2 and 3 the cell stack 10 is depicted as it is mounted with threaded bolts 68 between an opposed pair of electrolyte flow distribution endplates 70a and 70b. Preferably, the bolts 68 are coated with a plastic or other high electrically resistant material. The threaded bolts 68 are arranged around the periphery of the end plates 70a and 70b and also, or alternatively, extend through the holes 69 aligned in each partition providing separation space between the split cells as shown in Figure 4. As depicted in Figure 5, a cathode 72 extends through the endplate 70a and an anode 74 extends through the endplate 70b. A rectifier 75 applies a potential between the cathode 72 and the anode 74. An electrolyte solution supplied to the endplates 70a and 70b, a concentrate stream sequentially supplied to the apertures 22, 22', 46' and 46 and a dilution stream sequentially supplied to the apertures 34 and 34' provide electrically conductive fluid connection between the cathode 72 and the anode 74.